

Internship Posting Date: September 2, 2008  
Internship ID #: 08012



Intern Application Deadline: Until Project Completion

## New Jersey Department of Environmental Protection Internship Opportunity

Internship: ☒ Summer ☒ Fall Semester ☐ Winter Break ☒ Spring Semester

Internship Type: ☐ Co-op\* ☒ Credit-Bearing\* ☐ Non-credit

Internship Pay: ☒ Non- Paid ☐ Paid Pay Rate:

Intern Level: ☒ Graduate School ☒ Undergraduate ☐ High School

Suggested Background or Knowledge: Environmental Science; Biology, Geology; and Chemistry with a working knowledge of GIS and Excel Software

DEP Program Area and Work Unit Offering the Internship: Division of Watershed Management – Bureau of Environmental Analysis and Restoration (DWM - BEAR)

Internship Location: 401 East State Street, Trenton, NJ 08625

### **Pathogen TMDL Project:**

*This is an ongoing project that will require at least one intern per semester to complete.*

NJDEP has developed Total Maximum Daily Loads (TMDLs) to address pathogen (i.e. fecal coliform, e-coli bacteria) impairment in over 200 water bodies throughout the state. The TMDLs recommend additional monitoring to identify pathogen sources within the impaired watersheds. The Department performed microbial source tracking (MST) sampling at selected sites throughout the state during the summer of 2004-2006. Additionally, visual and biological assessment data was collected on each of the pathogen impaired streams by the NJ Watershed Ambassadors program in 2003-2006. The visual assessment data combined with the MST data can aid in identifying sources of fecal coliform bacteria and help to identify management measures to address this pollutant.

Intern duties would include:

- Review MST data and Americorp assessment data
- Analyze both data sets to identify potential sources of fecal coliform bacteria
- Utilize Geographic Information System (GIS) software to map/display results of data analysis
- Limited field work maybe required

More information about the Division of Watershed Management can be found at  
<http://www.state.nj.us/dep/watershedmgt/>

Estimated Project Duration and Suggested Weekly Work Schedule: Flexible – Commensurate w/ 3 or 4 credits

Internship Learning Objectives / Marketable Skills: ability to compile, assess and draw conclusions from data analysis

Description of DEP Program Area/Work Unit Offering the Internship:

Division of Watershed Management: The goal of the Division of Watershed Management (DWM) is nonpoint source (NPS) pollution control and comprehensive water resource management on a watershed basis. Towards that

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end, the DWM follows two paths. The first path is a rule approach for preventing water quality degradation, which employs regulations to achieve its goal. The second path is an action approach to remedy existing water quality problems, employing Total Maximum Daily Load (TMDL) determinations, NPS control (319) projects, and stream restoration efforts.

**The Bureau of Environmental Analysis and Restoration (BEAR)** develops technical “tools” for the use of the DWM and its partners in watershed planning, protection and restoration. Among those tools are: the development of TMDLs; the writing of rules and regulations including Stormwater Management Rules, Water Quality Management Planning Rules, Sewage Infrastructure Improvement Rules and portions of the Highlands Rules; and the development of environmental standards, technical or administrative guidance documents for rule implementation, model ordinances, and best management practices (BMPs).

Internship Hiring Contact: Rebecca Jones (609) 984-4423, [Rebecca.jones@dep.state.nj.us](mailto:Rebecca.jones@dep.state.nj.us)

Internship Sponsor: Kimberly Cenno, Supervisor or Patricia Ingelido, Principal Environmental Specialist

**\*For credit-bearing internships only:** Sponsor Phone Number and Email: (609) 633-1441  
[kimberly.cenno@dep.state.nj.us](mailto:kimberly.cenno@dep.state.nj.us) or [patricia.ingelido@dep.state.nj.us](mailto:patricia.ingelido@dep.state.nj.us)

**Please Respond With a Completed Application Form, Resume, and Cover Letter to:**

New Jersey Department of Environmental Protection / Division of Human Resources  
P.O. Box 408 / Trenton, NJ 08625

Attn: Internship Program

Email Address: [Rebecca.Jones@dep.state.nj.us](mailto:Rebecca.Jones@dep.state.nj.us)

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